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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 December 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-73</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-73</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1.   This action is in reply to application 10748046 filed on 12/30/2003.

2.   Claims 1-73 are currently pending and have been examined.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 1-73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5.   Claims 1, 17, 29, 35, 48, 57, and 73 recite "if the associated medication were to be administered to the person" in lines 9-10. It is unclear what would happen if the medication were not administered. As these are all the independent claims of the application, all the dependent claims are rejected for the same reason.

6.   Claims 1, 17, 29, 57, and 73 recite "if there is a match" in line 9. It is unclear what would happen if there was no match. As these are independent claims, all claims dependent from them are rejected for the same reason.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   Claims 1-56 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9.   Claims 1-34 are directed to a method. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a §101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876). Additionally, claim 1 recites "offering...using an offer communication technology" and "recording...in an electronic database". These machines are considered to be tied to insignificant, post-solution activities and therefore do not provide the structure needed to overcome the §101 issue.

10.   Claims 34-56 are directed to a system. The claims appear to be software per se without any structural requirements. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. (MPEP §2106.01).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or
        nonobviousness.

Examiner's Note: The Examiner has pointed out particular references contained in the prior art

of record within the body of this action for the convenience of the Applicant.   Although the

specified citations are representative of the teachings in the art and are applied to the specific

limitations within the individual claim, other passages and figures may apply.   Applicant, in

preparing the response, should consider fully the entire reference as potentially teaching all or

part of the claimed invention, as well as the context of the passage as taught by the prior art or

disclosed by the Examiner.

13.   Claims 1-13, 15, 17-24, 26, 28-69, 71, and 73 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schrier, et al. (US 6,317,719 B1) in view of Haq (US 2002/0095313 A1).

14.   Claim 1:

Schrier, as shown, discloses the following limitations:

- *accessing a list of possible medications that may be administered prior to or during a medical*

  procedure (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses

  list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *determining whether at least one match exists between any of the medications included in*

  the list and the record information, the match relating to the potential of an atypical clinical

  event occurring if the associated medication were to be administered to the person, and if

  there is a match, outputting a response relating to each match (see at least column 11, line

48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

15. **Claim 2:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the step of accessing a list of possible medications comprises accessing a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are related to certain therapeutic categories in Choose A Drug window). Schrier does not explicitly disclose the limitation of *the step of comparing the medication list comprises comparing the medication list to information in the specific person's medical record.* However, in at least paragraph 0012, Haq discloses that the system uses patient data and data from a pharmacy to check for interaction of drugs for patient. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

16.   **Claim 3:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the step of accessing a list of possible medications comprises accessing a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are related to certain therapeutic categories in Choose A Drug window) *and further comprising the steps of selecting a person to undergo the medical procedure* (see at least column 4, line 66 – column 5, line 10, i.e. system displays patient-specific portions of information and determines the patient "case"). With regard to the limitation of *receiving at least one of the medications from the list of medications,* Schrier does not explicitly disclose receiving the medication. However, the Examiner takes **Official Notice** that is old and well known in the art to receive the medication selected to be used on a person during the medical procedure after adverse drug reactions had been checked. The reason to combine the drug interaction verification technique of Schrier with the receiving of a medication for a particular medical procedure would be because once drug interaction is checked, it is known what medication can and cannot be used on a patient. Therefore, to proceed with a medical procedure, receiving the medication would be the next step. This combination provides a predictable result since it is well known to receive medication prior to administering it for a medical procedure.

17.   **Claims 4, 18, 31, 38, 49, and 60:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction* (see at least column 11, line 61 - column 12, line 47, i.e. system checks patient drugs against an allergy list).

18.   **Claims 5, 19, and 61:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. With regard to the limitation of *the medical procedure includes any medical procedure requiring the use of anesthesia,* Schrier does not explicitly disclose that the medical procedure includes medical procedures using anesthesia. However, the Examiner takes **Official Notice** that it is old and well known in the art that there are many types of medical procedures, including procedures that require anesthesia to be used. Additionally, applicant admits in paragraph 0004 of the background section of the application that anesthesiologists administer drugs implying that there are medical procedures that require anesthesia. The reason to combine the drug interaction verification technique of Schrier with the medical procedures, including those that require anesthesia, would be because it is highly desirable for medical practitioners and institutions to make sure that a patient will not have an adverse reaction to medication including anesthesia prior to administering that medication during a medical procedure. This combination provides a predictable result since it is well known to verify drug interaction prior to a medical procedure including those requiring anesthesia.

19.   **Claims 6-8, 20, 39-41, 50, and 62-64:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation as specified in claim 7, 40 and 63 of *the list of possible medications includes medications used in a radiologic medical procedure* (see at least paragraph 0101, i.e. drug interaction is checked for drugs used in radiology tests). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

Additionally, the combination of Schrier/Haq does not explicitly disclose that the list of medications includes medications used in medical procedures involving anesthesia or oncology as specified in claims 6, 20, 39, 50, 62 and 8, 41, 64 respectively. However, the examiner asserts that the type of data stored is considered to be non-functional descriptive subject matter. That is to say the type of data, i.e. the medication being used for a specific procedure, does not affect how the steps of the method are carried out. In other words, one of ordinary skill in the art would have recognized that the type of medication does not affect how the method accesses the list of medication, compare the list with a patient's medical record, determine a match, and output a response to the match. The type of data adds little if anything to the claim's process, and thus, does not serve as a limitation on the claims to distinguish over the prior art. One of ordinary skill in the art would have found it obvious to only search a list of medication that is relevant to a specific procedure.

20.   **Claims 9, 21, 33, and 65:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation of *the information in the person's medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person* (see at least paragraph 100, i.e. database includes medication patient is taking and foods the patient has eaten). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

21.   **Claims 10, 22, 34, and 66:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the response includes a listing of the match and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction* (see at least column 11, line 48 – column 12, line 47, i.e. system display lists the match of drug interactions and shows the patient is allergic to the drug).

22.   **Claims 11, 23, 44, 53, and 67:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the list of possible medications includes a dosage amount for each medication in the list* (see at least column 9, lines 10-37 and figures 5 and 9). Schrier does not explicitly disclose the limitation of *the response further includes an indication of the predicted severity of the atypical clinical event.* However, in at least paragraph 0112, Haq discloses that the system can display a red alert alarm for a potential major adverse effect and yellow alert alarm for a potential minor adverse effect or need for closer monitoring. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

23.   **Claims 12, 24, and 68:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the*

medication at the response (see at least column 9, lines 38-46 and figure 6, i.e. pharmacologic

and pharmacokinetic information on a selected drug is displayed).

24.   **Claims 13 and 69:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above.

Furthermore, Haq discloses the limitation of *the list of possible medications is received over a*

communication network from a remote computing device (see at least paragraph 0055 and figure

1, i.e. system uses computer processor and data storage media to send drug data through

communications media to a personal communicator which can be a laptop, PDA, or desktop

computer). It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the drug interaction verification technique of Schrier with the electronic

comparison method of Haq because it makes, "...an average community physician function like

an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

25.   **Claims 15, 26, and 71:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above.

Furthermore, Haq discloses the limitation of *the step of determining whether at least one match*

exists includes querying a data structure containing information selected from one of the groups

consisting of drug-drug interactions and drug-food interactions, and determining if each at least

one match correlates with one of the drug-drug interactions and drug-food interactions (see at

least paragraph 100, i.e. system compares drugs patient is taking to foods the patient eats to

determine if there is an interaction and produces an alarm if there is an indication of an

interaction). It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the drug interaction verification technique of Schrier with the electronic

comparison method of Haq because it makes, "...an average community physician function like

an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

26.   **Claim 17:**

Schrier, as shown, discloses the following limitations:

- *accessing a pre-defined list of possible medications that may be administered prior to or during a medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match* (see at least column 11, line 48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

27.   **Claim 28:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *modifying the medication list by adding or deleting medications from the list prior to comparing the medication list to information in the person's*

medical record (see at least column 7, line 57 – column 8, line 3, i.e. user can add or delete drugs

from list and after this is done system searches for drug interactions).

28.   **Claim 29:**

Schrier, as shown, discloses the following limitations:

- *accessing a pre-defined list of possible medications that may be administered* (see at least

    column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are

    related to certain therapeutic categories in Choose A Drug window)*;*

- *determining whether at least one match exists between any of the medications included in*

    the list and the record information, the match relating to the potential of an atypical: clinical

    event occurring if the associated medication were to be administered to the person, and if

    there is a match, outputting a response relating to each match (see at least column 11, line

    48 – column 12, line 47, i.e. system determines drug interactions then a display lists the

    match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *comparing the medication list to information in a person's medical record* (see at least

    paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for

    interaction of drugs for patient)*;*

It would have been obvious to one of ordinary skill in the art at the time of the invention to

combine the drug interaction verification technique of Schrier with the electronic comparison

method of Haq because it makes, "…an average community physician function like an expert at

all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

29.   **Claim 30:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above.

Furthermore, Schrier discloses the limitation of *the medication list includes a universal set of*

medications that may be administered regardless of the type of medical procedure (see at least

column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses universal list of drugs in Choose A Drug window). Schrier does not explicitly disclose the limitation of *the at least one medication is to be administered to the person prior to or during a medical procedure.* However, in at least paragraph 0101, Haq discloses the system can check for a drug's interaction with iodine-containing contrast prior to an x-ray procedure.   It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

30.   **Claim 32:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation of *the at least one medication is to be administered to the person prior to or during a medical procedure* (see at least paragraph 0101, i.e. drug has been administered to patient prior to x-ray procedure).   It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

With regard to the limitation of *the medical procedure includes any medical procedure requiring the use of anesthesia,* the combination of Schrier/Haq does not explicitly disclose that the medical procedure includes medical procedures using anesthesia. However, the Examiner takes **Official Notice** that it is old and well known in the art that there are many types of medical procedures, including procedures that require anesthesia to be used. Additionally, applicant admits in the background section of the application that anesthesiologists administer drugs implying that there are medical procedures that require anesthesia. The reason to combine the drug interaction

verification technique of Schrier with the medical procedures, including those that require anesthesia, would be because it is highly desirable for medical practitioners and institutions to make sure that a patient will not have an adverse reaction to medication including anesthesia prior to administering that medication during a medical procedure. This combination provides a predictable result since it is well known verify drug interaction prior to a medical procedure including those requiring anesthesia.

31.   **Claim 35:**

Schrier, as shown, discloses the following limitations:

- *a receiving component that receives a list of possible medications that may be administered prior to or during a medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *a determining component that determines whether a match exists between any of the medications included in the list and the medical record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person* (see at least column 11, line 48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

- *an outputting component that outputs a response relating to each match* (see at least column 11, line 48 – column 12, line 47, i.e. a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *a comparing component for comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

32.   **Claim 36:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the receiving component receives a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window). Schrier does not explicitly disclose the limitation of *the comparing component compares the medication list to information in the specific person's medical record.* However, in at least paragraph 0012, Haq discloses that the system uses patient data and data from a pharmacy to check for interaction of drugs for patient. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

33.   **Claim 37:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the receiving component receives a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window) *and further comprising a selecting component for selecting a person to undergo the medical*

procedure (see at least column 4, line 66 – column 5, line 10, i.e. system displays patient-specific portions of information and determines the patient "case"). With regard to the limitation of *receive at least one of the medications from the list of medications,* Schrier does not explicitly disclose receiving the medication. However, the Examiner takes **Official Notice** that is old and well known in the art to receive the medication selected to be used on a person during the medical procedure after adverse drug reactions had been checked. The reason to combine the drug interaction verification technique of Schrier with the receiving of a medication for a particular medical procedure would be because once drug interaction is checked, it is known what medication can and cannot be used on a patient. Therefore, to proceed with a medical procedure, receiving the medication would be the next step. This combination provides a predictable result since it is well known to receive medication prior to administering it for a medical procedure.

34.   **Claims 42 and 51:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation of *a retrieving component that retrieves a specific person's medical record from a unified healthcare system, and wherein information in the medical record includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person* (see at least paragraph 100 and figure 4, i.e. medical facility database communicates with pharmacy database in a unified healthcare system and the data retrieved includes medication patient is taking and foods the patient has eaten). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

35.   **Claims 43 and 52:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction* (see at least column 11, line 48 – column 12, line 47, i.e. system display lists the match of drug interactions and shows the patient is allergic to the drug).

36.   **Claims 45 and 54:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *a selecting component for selecting a medication of the list of possible medications that is involved in the match* (see at least column 5, line 53 – column 6, line 3, i.e. user selects a drug from a list of drugs in Choose A Drug window)*, and wherein the display component displays information about the selected medication* (see at least column 9, lines 38-46 and figure 6, i.e. pharmacologic and pharmacokinetic information on a selected drug is displayed).

37.   **Claims 46 and 55:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation of *the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device* (see at least paragraph 0055 and figure 1, i.e. system uses computer processor and data storage media to send drug data through communications media to a personal communicator which can be a laptop, PDA, or desktop computer). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier

with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

38.   **Claims 47 and 56:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Haq discloses the limitation of *the determining component includes a querying component that queries a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions, and wherein the determining component determines if each at least one match correlates with one of the drug-drug interactions and drug-food interactions* (see at least paragraph 100, i.e. system compares drugs patient is taking to foods the patient eats to determine if there is an interaction and produces an alarm if there is an indication of an interaction). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

39.   **Claim 48:**

Schrier, as shown, discloses the following limitations:

- *an accessing component that accesses a pre-defined list of possible medications that may be administered prior to or during a medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *a determining component that determines whether a match exists between any of the medications included in the list and the medical record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be*

administered to the person (see at least column 11, line 48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

- *an outputting component that outputs a response relating to each match* (see at least column 11, line 48 – column 12, line 47, i.e. a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *a comparing component for comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

40.   **Claim 57:**

Schrier, as shown, discloses the following limitations:

- *receiving a list of possible medications that may be administered prior to or during a medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match* (see at least column 11, line 48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient)*;*

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

41.   **Claim 58:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *receiving a list of possible medications comprises receiving a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window). Schrier does not explicitly disclose the limitation of *comparing the medication list comprises comparing the medication list to information in the specific person's medical record.* However, in at least paragraph 0012, Haq discloses that the system uses patient data and data from a pharmacy to check for interaction of drugs for patient. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "…an average community physician function like an expert at all times, day or night without fatigue and human error…" (Haq, paragraph 0009).

42.   **Claim 59:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier discloses the limitation of *receiving a list of possible medications comprises receiving a list of possible medications that may be administered to any person scheduled to*

undergo a specific type of medical procedure (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user receives list of drugs that are related to certain therapeutic categories in Choose A Drug window) *and further comprising selecting a person to undergo the medical procedure* (see at least column 4, line 66 – column 5, line 10, i.e. system displays patient-specific portions of information and determines the patient "case"). With regard to the limitation of *receive at least one of the medications from the list of medications,* Schrier does not explicitly disclose receiving the medication. However, the Examiner takes **Official Notice** that is old and well known in the art to receive the medication selected to be used on a person during the medical procedure after adverse drug reactions had been checked. The reason to combine the drug interaction verification technique of Schrier with the receiving of a medication for a particular medical procedure would be because once drug interaction is checked, it is known what medication can and cannot be used on a patient. Therefore, to proceed with a medical procedure, receiving the medication would be the next step. This combination provides a predictable result since it is well known to receive medication prior to administering it for a medical procedure.

43.   **Claim 73:**

Schrier, as shown, discloses the following limitations:

- *accessing a pre-defined list of possible medications that may be administered prior to or during a medical procedure* (see at least column 5, line 53 – column 6, line 3 and figure 3, i.e. user accesses list of drugs that are related to certain therapeutic categories in Choose A Drug window);

- *determining whether at least one match exists between any of the medications included in the list and the record information, the match relating to the potential of an atypical clinical event occurring if the associated medication were to be administered to the person, and if there is a match, outputting a response relating to each match* (see at least column 11, line

48 – column 12, line 47, i.e. system determines drug interactions then a display lists the match of drug interactions and shows the patient is allergic to the drug).

Schrier does not explicitly disclose the following limitation, but Haq as shown does:

- *comparing the medication list to information in a person's medical record* (see at least paragraph 0012, i.e. system uses patient data and data from a pharmacy to check for interaction of drugs for patient);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the electronic comparison method of Haq because it makes, "...an average community physician function like an expert at all times, day or night without fatigue and human error..." (Haq, paragraph 0009).

44.   Claims 14, 16, 25, 27, 70, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrier, et al. (US 6,317,719 B1) in view of Haq (US 2002/0095313 A1) in further view of Albaum, et al. (US 5,758,095 A).

45.   **Claims 14, 25, and 70:**

The combination of Schrier/Haq discloses the limitations as shown in the rejections above. Furthermore, Schrier does not explicitly disclose the following limitations, but Albaum as shown does:

- *selecting the person from a list of person's scheduled for a medical procedure* (see at least column 7, lines 42-65, i.e. physician selects specific patient from list of patients);

- *accessing the person's medical record prior to comparing the medication list to information in the person's medical record* (see at least column 10, lines 7-43, i.e. patient's height, weight, age, and admitting diagnosis are accessed before physician begins to query medication database).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the patient list of Albaum

because it provides, "…a system that makes available to the prescriber a variety of information regarding the patient's medication history, allergies, drug interactions, recommended doses…" (Albaum, column 2, lines 51-54).

46.   **Claims 16, 27, and 72:**

The combination of Schrier/Haq/Albaum discloses the limitations as shown in the rejections above. Furthermore, Albaum discloses the limitation of *retrieving a specific person's medical record prior to comparing the medication list to information in the person's medical record* (see at least column 7, lines 42-65, i.e. physician selects specific patient from list of patients and at least column 10, lines 7-43, i.e. patient's height, weight, age, and admitting diagnosis are accessed before physician begins to query medication database). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the drug interaction verification technique of Schrier with the patient list of Albaum because it provides, "…a system that makes available to the prescriber a variety of information regarding the patient's medication history, allergies, drug interactions, recommended doses…" (Albaum, column 2, lines 51-54).

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **JOSEPH BURGESS** whose telephone number is **(571)270-5547.** The Examiner can normally be reached on Monday-Friday, 9:00am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **JAMES REAGAN** can be reached at **(571)272-6710**.

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